REMARKS

Claims 1-6, 9-15, 17-23, 25-31, and 34 were pending. No claims have been added, cancelled, or amended. Accordingly, claims 1-6, 9-15, 17-23, 25-31, and 34 remain pending.

35 U.S.C. § 103 rejections

Claims 1-6, 9-15, 17-23, 25-31, and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,265,221 (hereinafter "Miller") and U.S. patent 6,772,350 (hereinafter "Belani"). Applicant respectfully traverses these rejections and requests reconsideration in view of the following discussion.

In the present Office Action, the examiner has generally repeated the same rejections made previously. In the prior Response, Applicant generally only added definitions from the Description to claim terms already recited in the claims. For example, the recited UCS was simply amended to add the claim language "wherein for a given user and associated UCS, a given community is a member of the UCS if the given user is a member of the given community" which is a definition of the term taken from the Description. This meaning for the term, and the other terms, has been maintained and argued throughout prosecution. In the present office action, the Examiner has generally not produced further arguments regarding the features. The present rejections and citations for those claim features preceding the previous amendment are identical to the previous rejections. Applicant has already traversed those rejections and maintains the traversals. For purposes of economy, Applicant reiterates and incorporates by reference in their entirety all previous arguments made in the response to the Office Action of May 17, 2007, Pre-Appeal Brief Request for Review, and Appeal Brief.

In paragraph 15 of the present Office Action, the Examiner cites Miller col. 2, lines 32-52, and generally suggests the features disclosed therein are equivalent to the

recited features "wherein said CIB includes: a user community set (UCS) for each user of said MCN." However, Applicant disagrees and submits the cited disclosure of Miller is not equivalent to the features of the presently claimed invention. In contrast, Miller merely discloses access control mechanisms based on stored user attributes. More specifically, Miller discloses:

"A still further object of the invention is to provide an access control mechanism . . . using customer-supplied attributes of users and objects, as well as customer-defined verbs.

According to the present invention, as embodied and broadly described herein, an access control mechanism using a processor is provided for specifying access control policies to entities, comprising subject means, verb means, object means, definition means, rule means and evaluation means. The processor may be embodied as a microprocessor and memory, or computer using software. The subject means stores user information in a matrix having information for each user on each row, and user attributes pertaining to the specific user in each field (column)." (Miller, col. 2, lines 32-52).

As may be seen from the above, Miller describes storing user attributes in a matrix. However, Miller's disclosures are not equivalent to the recited UCS "wherein for a given user and associated UCS, a given community is a member of the UCS if the given user is a member of the given community," as is recited in claim 1. Applicant submits a table of user attributes is not equivalent to a user community set (UCS) or a community set at all. Nor are the disclosures of Miller equivalent to an application community set or object community set, as recited. For at least these reasons, Applicant submits claim 1 is patentably distinct from the cited art. Likewise, as each of dependent claims 2-6, 9, 11-15, 17, 19-23, 25, 27-31, and 34 includes at least the features of the above independent claims upon which it depends, each of dependent claims 2-6, 9, 11-15, 17, 19-23, 25, 27-31, and 34 is believed patentable as well.

The Examiner further suggests in paragraph 15 that a "processing unit configured to ... permit access to said object in response to detecting said request is from a user; and a UCS of said user is a superset of an object community set (OCS) of said object," is

disclosed by Miller at col. 4, lines 56-col. 5, line 20. However, the cited portion of Miller merely describes group security policies. More particularly, Miller discloses

"Security policies are concerned not only with which subject may obtain access to which objects, but also with the granting, revoking, and denying of authorizations to and from users and groups. Given the set of authorizations for users and groups, some rule must be applied for deriving authorization for subjects.

In the general case, a user may belong to more than one group. In assigning privileges to subjects acting on behalf of a user, one can choose to:

- 1. Have the subject operate with the union of privileges of all the groups to which the user belongs, as well as all his or her individual privileges;
- 2. Have the subject operate with the privilege of only one group at a time;
- 3. Allow the subject to choose whether to operate with its user's privileges or with the privileges of one of the groups to which its user belongs; and
- 4. Implement some other policy.

Note that even if a subject S is constrained to be associated with at most one group to which its associated user belongs, a user is still not constrained to operate with the authorizations of only one group at a time. For example, if user U belongs to a group G1 that is authorized for a relation or view R and U also belongs to another group G2 that has been specifically denied authorization for R, then U can still gain access to R by employing a subject whose associated group is G1, unless U has also been individually denied authorization for R. Thus, this choice of policy constrains subjects rather than users, and can be thought of as a form of least privilege." (Miller, col. 4, line 57 - col. 5, line 20).

As may be seen from the above, Miller bases security policies on privileges of users and/or on combinations of privileges of the groups to which users belong. However, as argued above, Miller does not disclose maintaining a UCS or an OCS in a CIB. The attributes Miller stored are privileges, not community sets. Therefore, not only does Miller not disclose basing authorization on whether or not a UCS is a superset of an OCS, but it would not have been obvious to one of ordinary skill in the art at the time of the invention to base authorization on such a criterion, since the information needed to determine the necessary condition, a UCS and an OCS, is not stored in Miller's matrix. Instead Miller suggests that the privileges of users and groups are what is maintained and

access authorization is determined by combining privileges of users and groups according to some set of rules. Accordingly, Applicant finds no teaching or suggestion in the cited art of "detecting said request is from a user; and a UCS of said user is a superset of an object community set (OCS) of said object," as is recited in claim 1. Moreover, since Miller's matrix does not include the concept of a community set, claim limitations directed toward an object community set or an application community set are also distinguished from the cited art.

For at least these additional reasons, Applicant submits claim 1 is patentably distinct from the cited art. As each of independent claims 10, 18, and 26 include similar features, each of these claims are patentably distinct for reasons similar to that of claim 1. Likewise, as each of dependent claims 2-6, 9, 11-15, 17, 19-23, 25, 27-31, and 34 includes at least the features of the above independent claims upon which it depends, each of dependent claims 2-6, 9, 11-15, 17, 19-23, 25, 27-31, and 34 is believed patentable as well.

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CONCLUSION

Applicant submits the application is in condition for allowance, and an early

notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the

above referenced application(s) from becoming abandoned, Applicant(s) hereby petition

for such extensions. If any fees are due, the Commissioner is authorized to charge said

fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No.

501505/5181-75800/RDR.

Respectfully submitted,

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